WHAT IS CLAIMED IS:

1. A hub-bearing assembly for the wheel of a motor vehicle, of the type where the hub (1) forms integrally or is securely fixed to a radial flange (7) to be fastened to a wheel (8), wherein, associated with the assembly is a measuring device (14) mounted on a non-rotating part (12) of the vehicle and operatively facing an essentially radial surface (13) secured to or integral with the flange (7) for detecting real time variations of the axial position of the surface (13) due to elastic deformation of the flange (7) caused by forces transmitted from the wheel (8) to the hub flange (7).

2. The assembly of claim 1, wherein the measuring device (14) is an optical device and the surface (13) is an optically reflecting surface.

3. The assembly of claim 2, wherein the measuring device (14) includes

emitter means for projecting a light radiation onto the reflecting surface (13) and

receiver means for receiving the light radiation reflected back by the reflecting surface (13).

4. The assembly of claim 3, wherein the optical measuring device (14) includes emitter means for emitting a laser beam.

5. The assembly of claim 1, wherein the measuring device (14) is arranged for carrying out said measuring operation in proximity of the peripheral zone of the hub flange (7).

6. The assembly of claim 1, wherein the surface (13) is facing the inboard side of the vehicle.

7. The assembly of claim 1, wherein the measuring device (14) is fixable to a non-rotating race (12) of the bearing.

8. The assembly of claim 1, wherein the measuring device (14) is connected (15) to an electronic processing unit mounted on board of the vehicle and set for automatically controlling, based on the deformation signals received from the measuring device (14), the wearable members of the braking system for adapting their position to the position of a rotor brake (5) rigidly connected to the flange (7) of the hub (1).

9. The assembly of claim 1, wherein the measuring device (14) is connected (15) to an electronic processing unit mounted on board of the vehicle and set for recognizing, based on the deformation signals received from the measuring device (14), a condition indicative of an impending loss of adhesion with the road.

10. The assembly of claim 1, wherein the measuring device (14) includes an inductive position sensor and that the essentially radial surface (13) is of a metallic material.